

<b>Activity:</b>	<b>8.2 Conduct System Testing</b>
<b>Responsibility:</b>	Project Team or Independent Test Team
<b>Description:</b>	<p>During system testing, the completely integrated software product is tested to validate that the product meets all requirements. System response timing, memory, performance, security, and the functional accuracy of logic and numerical calculations are verified under both normal and high-load conditions. Query and report capabilities are exercised and validated. All operating documents are verified for completeness and accuracy.</p> <p>System testing is conducted on the system testbed using the methodology and test cases described in the System Test Plan. The system testbed should be as close as possible to the actual production system. Either the project team or an independent test team conducts system testing to assure that the system performs as expected and that each function executes without error. The results of each test are recorded and upon completion included as part of the project test documentation.</p> <p>When errors are discovered, they should be reviewed by the test team leader to determine the severity and necessary subsequent action. If appropriate, minor problems can be corrected and regression tested by the project team programmers within the time frame allotted for the system test. Any corrections or changes to the software product must be controlled under configuration management. Major problems may be cause to suspend or terminate the system test, which should then be rescheduled to begin after all of the problems are resolved.</p> <p>Encourage users to participate in the system tests to gain their confidence in the software product and to receive an early indication of any problems from the user's perspective. Inform users that errors and discrepancies may occur during testing and explain the error correction, configuration management, and retest processes.</p> <p>At the successful conclusion of system testing, the software product is ready for installation and acceptance testing.</p>
<b>Work Products:</b>	Review the draft versions of the operating documents, Training Plan, and Installation Plan. Update the documents as needed. Deliver the final versions of the operating documents, Training Plan, and Installation Plan to the system owner and user for review and approval. Place a copy of the approved documents in the Project File.

***Work Products,  
continued:***

Place a copy of all system test materials (e.g., inputs, outputs, results, and error logs) in the Project Test File.

Generate a test report at the conclusion of the system test process. The report documents the system test results and lists any discrepancies that must be resolved before the software product is installed and prepared for acceptance testing. Place a copy of the report in the Project File.